

CLAIMS

1. An in vivo sensing system comprising:
a housing;
5 at least one sensing device; and
at least one friction reducing mechanism.
2. The in vivo imaging system according to claim 1 wherein the housing includes a material selected from a group consisting of: glass, plastic, and rubber.
- 10 3. The in vivo sensing system according to claim 1 wherein the housing has a shape selected from a group consisting of: spherical shape, capsule shape, and ovoid shape.
4. The in vivo sensing system according to claim 1 wherein the housing is collapsible.
- 15 5. The in vivo sensing system according to claim 4 wherein the housing includes at least a semi-permeable membrane.
6. The in vivo sensing system according to claim 1 comprising a hydrocarbon casing.
7. The in vivo sensing system according to claim 1 wherein the housing is at
20 least partially transparent.
8. The in vivo sensing system according to claim 1 wherein the housing comprises at least one attachment mechanism.
9. The in vivo sensing system according to claim 8 wherein the attachment mechanism comprises at least one constituent selected from the group
25 consisting of: glue, rings, indentations, grooves, fasteners, niche, anchors, suction cups, and clasps.
10. The in vivo sensing system according to claim 1 wherein the sensing device has a shape selected from a group consisting of: spherical shape, capsule shape, and ovoid shape.

11. The in vivo sensing system according to claim 1 wherein the sensing device has a weight that is evenly distributed along a horizontal and a vertical axis of the sensing device.
12. The in vivo sensing system according to claim 1 comprising at least one ballast weight.
13. The in vivo sensing system according to claim 1 comprising at least one directional activator.
14. The in vivo sensing system according to claim 13 wherein the directional activator comprises at least one magnet.
15. The in vivo imaging system according to claim 1 wherein the at least one imaging device comprises a magnetic switch configured for controlling at least one electrical component of the sensing device.
16. The in vivo sensing system according to claim 1 wherein the at least one sensing device comprises an energy receiving unit.
17. The in vivo sensing system according to claim 16 wherein the energy receiving unit comprises:
an induction coil;
a rectifier circuit; and
a capacitor.
18. The in vivo sensing system according to claim 1 comprising at least one sensor selected from the group including: image sensor, blood detection sensor, pH sensor, electrical impedance sensor, pressure sensor, and temperature sensor.
19. The in vivo sensing system according to claim 1 comprising a transmitter.
20. The in vivo sensing system according to claim 1 comprising an antenna.
21. The in vivo sensing system according to claim 1 wherein the sensing device comprises a circuit board.
22. The in vivo sensing system according to claim 20 or claim 21 wherein the antenna is attached to the circuit board.
23. The in vivo sensing system according to claim 22 wherein the antenna is embedded in the circuit board.

24. The in vivo sensing system according to claim 1 wherein the friction-reducing mechanism includes a liquid.
25. The in vivo sensing system according to claim 24 wherein the liquid is selected from a group consisting of: water; saline solution; oil, glycerin, and
5 bodily fluid.
26. The in vivo sensing system according to claim 24 wherein the sensing device has a specific gravity that does not substantially exceed the specific gravity of the liquid.
27. The in vivo sensing system according to claim 24 wherein the liquid is
10 introduced into the housing in vivo.
28. The in vivo sensing system according to claim 24 wherein the liquid has a diffraction coefficient substantially similar to a diffraction coefficient of the housing.
29. The in vivo sensing system according to claim 24 wherein the liquid is at
15 least partially transparent.
30. The in vivo sensing system according to claim 1 wherein the sensing device comprises an imaging device.
31. The in vivo sensing system according to claim 30 wherein the imaging device comprises:
20 at least one image sensor;
 and
 at least one illumination element.
32. An in vivo imaging system comprising:
25 an outer covering;
 an image sensor; and
 a liquid disposed between the outer covering and the sensor.
33. The in vivo imaging system according to claim 32 wherein the housing comprises at least one attachment mechanism selected from the group consisting of: glue, rings, indentations, grooves, fasteners, niche, anchors, suction cups, and clasps.
- 30 34. The in vivo imaging system according to claim 32 comprising at least one ballast weight.

35. The in vivo imaging system according to claim 32 comprising at least one directional activator.
36. The in vivo imaging system according to claim 35 wherein the at least one directional activator comprises a magnet.
- 5 37. The in vivo imaging system according to claim 32 wherein the at least one imaging device comprises an energy receiving unit.
38. The in vivo imaging system according to claim 32 further comprising at least one sensor.
39. The in vivo imaging system according to claim 38 wherein the at least one sensor
10 is selected from the group including: blood detection sensor, pH sensor, electrical impedance sensor, pressure sensor, and temperature sensor.
40. The in vivo imaging system according to claim 32 comprising a transmitter.
41. The in vivo imaging system according to claim 32 comprising an antenna and a circuit board.
- 15 42. The in vivo sensing system according to claim 41 wherein the antenna is embedded into the circuit board.
43. A method for sensing an in vivo site comprising the steps of:
enabling an in vivo sensing device disposed within a housing to be moved in a friction-reduced manner.
- 20 44. The method according to claim 43 comprising the step of:
applying an external force to the in vivo sensing device.
45. The method according to claim 44 wherein the external force is selected from a group including: electro-magnetic force torque generating fields, magnetic torque generating fields, and gravitational force.
- 25 46. The method according to claim 45 wherein applying an external force includes repositioning a patient.
47. The method according to claim 43 further comprising the step of:
transmitting data from the in vivo sensing device.
48. The method according to claim 43 comprising the steps of:
30 reviewing transmitted data; and

applying an external force to change the direction of the sensing device based on the reviewed transmitted data.

49. The method according to claim 43 comprising the step of controlling the imaging device.
- 5 50. The method according to claim 43 wherein the in vivo sensing device is an imaging device.